What is claimed is:

1. A light-emitting device, comprising:

a substrate;

a $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer located on the substrate; and

an illuminant epitaxial structure located on the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer.

2. The light-emitting device according to claim 1, wherein the substrate is a transparent substrate.

3. The light-emitting device according to claim 1, wherein the substrate is a sapphire substrate.

4. The light-emitting device according to claim 1, wherein a material of the substrate is selected from the group consisting of Al_2O_3, SiC, Si, GaN and GaAs.

5. The light-emitting device according to claim 1, wherein a thickness of the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer is between about 10Å and 2000Å.

6. The light-emitting device according to claim 1, wherein a number of $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) structures in the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer is greater than or equal to 2.

7. The light-emitting device according to claim 1, wherein a composition of the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer is selected from the group consisting of a $Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$)/SiN structure and a $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) structure, and a material in contact with the substrate is selected from the group consisting of SiN and $Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$).

8. The light-emitting device according to claim 1, wherein the light-emitting device is selected from the group consisting of a light-emitting diode and a laser diode.

9. A method for manufacturing a light-emitting device, comprising:

providing a substrate;

forming a $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer on the substrate; and

forming an illuminant epitaxial structure on the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer.

10. The method for manufacturing a light-emitting device according to claim 9, wherein in the step of forming the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer, a temperature for growing SiN of the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer is between about 200℃ and 900℃.

11. The method for manufacturing a light-emitting device according to claim 9, wherein in the step of forming the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$)

superlattice buffer layer, a temperature for growing $Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) of the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer is between about 200℃ and 900℃.

12. The method for manufacturing a light-emitting device according to claim 9, wherein the substrate is a transparent substrate.

13. The method for manufacturing a light-emitting device according to claim 9, wherein the substrate is a sapphire substrate.

14. The method for manufacturing a light-emitting device according to claim 9, wherein a material of the substrate is selected from the group consisting of Al_2O_3, SiC, Si, GaN and GaAs.

15. The method for manufacturing a light-emitting device according to claim 9, wherein a thickness of the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer is between about 10Å and 2000Å.

16. The method for manufacturing a light-emitting device according to claim 9, wherein a number of $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) structures in the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) superlattice buffer layer is greater than or equal to 2.

17. The method for manufacturing a light-emitting device according to claim 9, wherein a composition of the $SiN/Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$)

superlattice buffer layer is selected from the group consisting of a $Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$)/SiN structure and a SiN/$Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$) structure, and a material in contact with the substrate is selected from the group consisting of SiN and $Al_{1-x-y}In_xGa_yN$ ($0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $x+y \leqq 1$).

18. The method for manufacturing a light-emitting device according to claim 9, wherein the light-emitting device is selected from the group consisting of a light-emitting diode and a laser diode.